STUDY TOUR REPORT
TO TOKYO, JAPAN

THE INTERNATIONAL JOINT SEMINAR & VISIT TO CLEAN AUTHORITY OF TOKYO (Shin-Koto Incineration Plant) TOKYO METROPOLITAN GOVERNMENT

Humanizing Collaboration between Indonesia & Japan

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CHAPTER ONE
MARKETING ANALYSIS REPORT

To analyze marketing perspective in Japan, the author uses several aspects namely political, economic, social, technological, legal and environment. It is intended to make the explanation more attractive and easy to understand.

A. Political

To most foreigner, Japanese politics may appear quite confusing. Regardless of whom is leading the country, Policy does not seem to change. In fact, most legislation isn't arranged by the members of the board member but it produced by ministers and bureaucrats. So, not surprisingly, the Japanese political systems more affected by a tradition of group rather than personalized leadership. The political aspect related to marketing perspective in Japan that author want discussed is about foreign investment. In Japan, the institutions that regulate the foreign investment is Foreign Exchange and Foreign Trade Law. This institution regulates approvals related to direct inward investments. It depends on:

1) Jurisdiction where investors are located;
2) The target Industry in which the company operates; and
3) The characteristic of the certain asset got involved in case of asset acquisitions,

Based on the rules, it can be seen that the Japanese government is open to companies that want to run business in Japan but there are some strict rules that must be obeyed.

B. Economic

Generally, Japanese business culture is seen as the biggest barrier to starting a business in Japan for many foreign companies. But in fact, it is not entirely true. The problem is simply because of the misapprehension driven by business famous superstition in Japan which gives an understanding that doing business in japan is very risky and it is hard to make a profit.

One of the concerns of foreign companies when they want to go into business in a country is tax. National corporate taxes in japan are generally calculated at a rate of 30% for all revenues. However, for a small company with a capital of less than ¥100 million, the first ¥8 million income is taxed at a rate of 22%. However, if local taxes are also taken into account with national corporate tax rates that reflect tax deductions from local corporate taxes when paid, about 41% to 42%. The different effective tax rates applied by companies are subject to "factor-based corporate tax" whose tax calculations also take into account other value-added factors.

C. Social

Issues concerning work-life balance and labor market segmentation affect Japan's demographic order. A large wage difference between full-time workers and part-time workers makes working in major Japanese companies more favorable. The income of households led by part-time workers is more than quadrupled from households headed by non-time workers. This has caused about 100,000 people aged 15-29 years of age to Tokyo City each year causing the disproportionate working age of rural workers. Furthermore, fertility rates are significantly lower in urban areas than in rural areas. Long working hours cause women not to look for high-paying jobs because the extreme population density in urban areas is the cause of family size restrictions. Lack of daycare also makes it difficult to achieve a balance of work and family life.

Productivity is strongly related to population changes. Productivity growth is an urgent economic priority for Japan. To achieve sustainable prosperity in an aging economy, productivity per worker must increase rapidly. In terms of productivity, Japan must run faster just to maintain its position in the face of the economy of other countries. Currently, through its National Spatial Strategy, Japan implements bold policies to achieve a new vision of Japan's compact network. The goal is to maintain and even increase productivity, improve service levels to communities and build infrastructure to optimize the welfare of shrinking populations.

D. Technological

As measured by total GDP, Japan is the four largest global economy. This is recognized as a result of its mastery in the field of technology. Five interesting things about Japan right related technology are:

1) Electronics is Japan's main industry, and consumption of electronic components in Japan is estimated at least worth $ 40 billion, representing about 15% of the consumption of electronic components worldwide
2) DTAM Japan about $ 25 billion (including Keiretsu distribution). It represents about 30% of the total worldwide DTAM. Of distributors registered in Japan, the distribution of "independent" DTAM (non-Keiretsu) is still between $ 12-14 billion. This is a larger DTAM than the United States and Europe.
3) Japan ranks # 2 in the world in the influence of electronic system design. The effect of this design drives 25% of total global electronic chip purchases.
4) The Japanese economy grows back, estimated at 2% to 2.5% in the fiscal year ending March 31, 2014. Abe's government, in collaboration with the Bank of Japan, took aggressive steps to stimulate growth in Japan. The Japanese yen has weakened against the dollar by about 20% since the start of CY2013, allowing Japan's exports to be much more competitive in global markets; The stock market surged in 2013; And Japan is now entering the Trans-Pacific Partnership (TPP), which will further help deregulate and eliminate tariffs with 11 other TPP member countries.

E. Legal

The Japanese legal system is very different from the Western system. The main law governing individual employment and labor relations in Japan is Labor Standars Law. There are 4 things that affect employee employment in Japan that is:

1) Working rules of work rules established by each employer.
2) Individual employment contract between employer and employee
3) corporate habits and practices, and
4) Relevant legal cases and precedents

The basic standards for working conditions are defined in the Manpower Act. This standard is intended only to regulate minimum working conditions and employers are expected to build and maintain a work environment that exceeds those standards. Any working conditions that fall below these minimum standards will be dealt with in accordance with applicable regulations.

Employers who employ ten or more workers continuously in a particular workplace must establish a rule called "work rules", which apply to all their employees. The Labor Standards Act specifies items to be included in the work rules. These rules should then be submitted to the Office of the Inspectorate of Labor Standards.

F. Environmental

In pursuit of a greener economy for Japan, business owners' efforts to manage their companies with the environment in mind will play an important role. The business owner's voluntary effort to remember environmental concerns goes beyond simply reducing their own environmental burden. They can also help reduce the environmental impact of the products they make when used and contribute to increased environmental awareness at the resource extraction stage. Also through their ongoing research that the company is managing the development of new business areas and environmental technologies. Another important area for action is the study and environmental education conducted by research and education institutions.

The management of this green enterprise can reduce the use of resources and energy and environmental load of business activities throughout the product life cycle. In addition to reducing environmental impacts within questionable business areas, green procurement practices and the provision of environmentally friendly goods and services can broadenly promote sustainable consumption and production.

These efforts will result in progress in creating sustainable communities and market expansion for environmentally friendly products and services. Companies that have successfully adjusted their strategy to pursue this good economic and environmental cycle will not only contribute to the formation of such a society; They will also gain a more competitive position, thus strengthening their ability to win in the market.

G. Recommendation

Since I am a government employee and my background is much related to the local government's financial management, my recommendation is mainly to local governments in Indonesia.

1) Policies related to investor-, both domestic and foreign, must be formulated with a bureaucracy that is not convoluted to encourage investors to run their business in local government in Indonesia. But on the other side the agreement between the local government and the investor must be clearly regulated and not harming the regional government. It aims to create a good synergy between companies and local governments that create mutual benefits.
2) Another thing that to be considered for an investor to invest or operate a business in a country is the rate of taxes. For this reason, the central government, in particular the regional ministries, must set a tax rate that is profitable for the state but still attracts investors.
3) Indonesia has an advantage in terms of the labor force in which the Indonesian labor force has a diverse productivity age. This needs attention is how to manage these human resources to become one of the strengths of local government organizations.
4) Indonesia is still very weak in the use of technology in various lines of life. Whereas if it can be utilized properly, the use of technology can bring an organization becomes more efficient in managing its costs. For that the Indonesian government should try to develop the use of technology in the activities of the organization. One of the things that can be done is to invest the budget in technology development projects.

CHAPTER TWO
CROSS-CULTURAL ANALYSIS REPORT

A. Differences in value, beliefs, and policies

Japanese consumers are value-conscious consumers and apply the principle of efficiency when buying groceries. This is due to the condition of economic downturn in the past. The current global economic crisis is increasingly intensifying the paradigm, consequently, consumers in Japan are increasingly aware of value. The recession has also affected the habits of Japanese consumers who cook dinner at home. In addition, Japanese consumers are less likely to eat takeaway food at home. They tend to buy cheaper cuts and types of meat and seafood.

Unlike Japanese consumers, Indonesian consumers are more sensitive to price without paying too much attention to the value of a product. The lower middle class only cares about the cheap price of a product regardless of the quality of a product. Though low-quality products in the long term actually even increase the cost of maintenance and replacement of spare parts. While the middle to upper class only assess a product from the expensive price and the brand attached to a product regardless of the quality and function of a product. It can be concluded that Japanese consumers are more mature in purchasing products or consuming than Indonesian consumers.

B. Acculturation

One of the Japanese culture that became an advantage in the business sector is about discipline and hard work that led to high levels of work productivity. Important points about Japanese work culture can be described as follows:

1) Team Work

A salaryman in Japan will feel his work like a village where all the people work together to build their environment. This is a typical Japanese thought known as *mura no guruupu* or "Village Relationship".

2) Life Time Employment

Most Japanese have a life time employment principle in which they will only work in one company until retirement. In the company where I work in Japan, many employees have worked for more than 40 years and they are on average over the age of 60 years. The company seems to be a home or village where Japanese people cannot be separated from each other. Unlike the Indonesian people where they consider the office as "and sometimes work is lazy. For the Japanese, sometimes the office or factory becomes his bed when there is overtime that requires them to work until late at night.

3) Senior & Junior

Japan is one of the countries that still holds seniority. There is the term *Senpai* and *Kouhai* which means senior and junior. Young ones must obey the older when given orders. This system is absolute and becomes a system in all aspects of life in Japan. Senior should direct and teach their, junior instead must respect and follow and what his senior orders. So rarely in an organizational structure in a Japanese company, under-30 employees who already have high positions, top-level managers or directors are usually 50-60 years old.

4) Kaizen

Kaizen means language improvements. The nature of the Japanese spirit and not quickly complacency gave birth to this principle of kaizen. In the world of work, kaizen is a strategy aimed at continuously improving toward better production processes, product quality and quantity, reducing operational costs, reducing waste, to improving job security.

5) Shame if coming home fast

Overtime has become commonplace in a job in Japan. The average Japanese worker can work up to more than 12 hours a day. Those who return quickly are considered unproductive and unimportant to the company. Japanese love for their work is evidenced by the amount of time they spend in the workplace.

Many companies in Indonesia, the Japan's leading culture has started to acculturate into a culture that led from top management to workers. This can be seen in applying performance approaches in companies in Indonesia even to public organizations.

C. World Brands

We all know that superior Japanese products are the products in the electronics and machinery industry. Electronic products ranging from household products to mobile phones, while machines ranging from motor vehicles to heavy vehicles. The creation of such industrial excellence in Japan was created through years of effort through product research and development and acculturation from different cultures. Japanese products that dominate the Indonesian market are electronics companies such as Sony and Toshiba, while for motor vehicles are Honda, Yamaha and Suzuki.

D. Recommendation

1) The difference in maturity between Japanese consumers and Indonesian consumers can be exploited by companies that want to sell their products in Indonesia to widen their product variation. Segmentation is done in accordance with the market share of the lower middle class who are looking for products with low prices and upper middle groups that focus on brand strength. This strategy has been implemented by large companies such as Samsung which although the company continues to innovate to create premium products to beat a competitor company that has a big name but on the other side also creates a product that has a low price for the middle market share down.

2) Companies in Indonesia must create working conditions that generate employee care and concern for the future of the company. This can be created if the company put forward a policy that is also oriented to the comfort and happiness of employees. From one side, it can be viewed as a form of investment by the

company for the sake of sustainability and get the advantage of competitiveness that is the excellence of human resources.

CHAPTER THREE
COMPANY VISIT ANALYSIS REPORT
TO SHIN KOTO INCINERATION PLANT

The management of waste disposal, especially household waste, becomes a problem in almost all countries. Conventional waste disposal is thought to be unable to address the large buildup of waste, as a result other forms of alternative waste disposal are adopted. One of the most common forms of waste disposal is waste Incineration. Incineration is a method of processing waste by burning waste in a furnace. Incineration technology is a technology that converts solid matter into gaseous material, as well as hard-to-burn solids, ie ash (bottom ash) and dust (fly ash). Heat generated from the incineration process can also be utilized to convert a material into another material and energy, for example for electricity generation and hot water. In some developed countries, incineration technology has been implemented with large capacity (city scale). Large scale incinerator technology continues to grow, especially with the many rejection of this technology that is considered problematic in the angle of air pollution. One of the advantages developed in the latest technology of this incinerator is the utilization of energy, so that the name incinerator tends to change like waste-to-energy, thermal converter Incineration is the process of disposal by combustion at a very high temperature (> 800ºC) to reduce waste Combustible, non-recyclable. The incineration targets are to reduce mass and exhaust volume, kill bacteria and viruses and reduce toxic chemicals, and facilitate further handling of waste. Incineration can reduce domestic solid waste volume up to 85-95% and weight reduction up to 70-80%.

Incineration technology has several targets, namely:

1) Reduced mass / volume: the incineration process is an oxidation process (with oxygen or air) combustible waste at high temperatures. Will be removed ash, gas, waste combustion and ash, and also obtained heat energy. When combustion is perfect, it will add a little waste remaining and the gas is not perfect burning (like CO). The heat available from previous waste combustion will affect the amount of fuel supplied. Continuous incinerators will save fuel.
2) Destroy dangerous components: incinerator not only to burn city waste. It has been applied to non-domestic waste, such as from industry (including B3 waste), from medical activities (for infectious waste). Incinerators are not only for burning solid waste. It has been used for non-solid waste, such as sludge and degradable liquid waste. This technology is a standard means to handle medical waste from hospitals. The main goal is to destruct dangerous pathogens such as infectious germs. The main requirement is high heat (operated above 800o C). In this case the waste does not have to be combustible, so it takes the fuel subsidy from the outside.
3) Incineration is identical to combustion, which can produce energy that can be utilized. An important factor to consider is the quantity and continuity of the waste to be supplied. Quantity must be sufficient to produce energy continuously for uninterrupted energy supply.

This technology is capable of reducing waste volume but incineration technology requires high investment, operation and maintenance cost. This burning facility is recommended only used to destroy / burn garbage that cannot be recycled, or not feasible to buried. This tool must be equipped with a control and control system to meet the particle and exhaust emissions limits so as to ensure that smoke coming out of the waste burner is a neutral smoke / gas.

The concept of incineration must be especially developed in countries with narrow land such as Japan. Japan has more than one incineration plant. One incineration in Japan was in Tokyo City which was named Shin-Koto Incineration Factory. Shin-Koto Incineration Plant started operations in late 1998. It plays an important role in waste disposal and recycled energy generated during the incineration process whereby the

process can generate electricity for energy recycling. The plant can handle 1,800 tons of waste per day and generate approximately 50000 kW of electricity derived from steam. It burns continuous combustible wastes at high temperatures to ensure complete destruction of the dioxins. In addition, the manufactured gas from the incineration process is purified by a state-of-the-art air pollution prevention facility to remove most of the hydrogen chloride contained in sulfur dust and sulfur oxide.

At the first stage, waste around Tokyo City was taken by truck from several locations to the incineration plant. At the Incineration plant, the waste is discharged to a storage place. The waste was then transported and dropped to the carriage by a device called a crane. The waste is gradually incorporated into the incinerator. These incinerators are heated at varying temperatures depending on the type of waste that is incinerated. The heat generated from the waste combustion is then used to heat the water inside the boiler. The steam from the water heater is then supplied to the turbine generator. The turbine rotation will generate electrical energy. The ash from the burning of the waste then falls into the collection area. At this point, there is a magnet used to retrieve the rest of the metal which can then be recycled. Exhaust gases containing fine ash and other toxic vapors are then filtered by a scrubber reactor. From the scrubber, the gas then passes the fine particulate drainage system, which further reduces the toxicity of the flue gas. The exhaust gas is then released through the chimney.

In addition to handling waste, Shin-Koto Incineration Factory also provides thermal energy for nearby community and community facilities through steam generated from boiling water originating waste combustion through an energy recovery process known as WtE (waste to energy). Steam is transported through large pipes to nearby buildings including sports centers and also the Yumenoshima Tropical Greenhouse Dome attractions. In the greenhouse dome, heat energy is used to maintain a stable indoor temperature so that tropical plant species can grow well. Energy recovery from waste combustion is said to be a 'green' process because it uses waste that has no other beneficial purpose and produces enough energy to replace fossil fuel supplies. As mentioned earlier, steam from water heating can be used to power turbines and generate electrical energy. To maximize the energy produced, the waste used into the process must be first filtered out to remove large materials, recyclable materials, and non-combustible materials and other materials that can be harmful if burned. It is also intended to reduce pollutant emissions and other harmful gases. At the Shin-Koto incinerator plant, every ton of burned waste can generate 2 MWh of regional heating and 67 MWh of electricity. This is wasted energy if the waste is left to rot in the final dump. The electrical energy generated from the factory can then be sold to households and businesses. Although recycling has been declared by the Tokyo Metropolitan Government as a way to solve waste problems, incineration mechanisms still play a major role in handling waste in Tokyo. In 2010, approximately 76% of waste in Tokyo City is handled by the incineration process. Shin-Koto Incineration Factory, As Tokyo's largest incineration plant, has played an important role in dealing with waste in the city. First, the incineration plant can minimize the volume of waste, since the volume of waste can be reduced up to 0.05% after incineration, and it can reduce the burden of government providing landfills. Second, this process can reduce air pollution due to the smell of waste and prevent the spread of disease.

As we know, waste is one of the problems that have a high level of urgency in Indonesia. The high population density makes the consumption of society is also high. On the other hand, the land to accommodate the rest of the consumption is limited. Issues are increasing. Garbage consumption of urban residents it turns out that many are not easy to decompose, especially plastic. The accumulation of plastic waste creates serious contamination. This condition is realized by some people by growing efforts to reduce plastic waste. The new plastic bags can begin to decompose for at least more than 20 years in the soil. If the plastic bag is in the water, it will be more difficult to decompose. The research results of Jenna R. Jambeck and friends (publication on www.sciencemag.org 12 February 2015) stated that Indonesia was in second position of plastic waste contributor to the sea after China, followed by the Philippines, Vietnam, and Sri Lanka. According to Greeneration Research, a 10-year non-governmental organization that follows the issue of waste, one person in Indonesia averages 700 plastic bags per year. In nature, unadulterated plastic bags pose a threat to life and ecosystems. Consider that condition, the application of the incineration plant we discussed before can be an alternative in handling waste problems in Indonesia.

In some areas of Indonesia, especially urban areas have developed a system of distributing waste from household to final disposal. This can be the basis for the development of this incineration system. After that is how the form of organizational management, whether managed by central government or provincial government and whether part of government organization or form of government cooperation with third party (private). After that it is planned to build the factory and related to the investment of factory development. The important thing to note is the sustainability of the management and maintenance of this facility in order to have clear benefits. On the other hand, the incinerating system is also the answer to the problem of energy supply in Indonesia. We know Indonesia is a country rich in oil and coal energy but if its wealth is not utilized optimally it will be useless so that foreign companies to exploit Indonesia's energy source mines but behind it all the exploitation of oil and coal resources conducted by the company Foreigners make Indonesia less and not prosper on the economic side. In addition, Indonesia still needs petroleum and coal to power all its power plants, but unfortunately all the power plants are fueled by petroleum and coal which will result if the price of oil rises then the price of electricity per watt it goes up so things This makes the people feel heavy to pay the electricity bills are increasingly expensive. As mentioned earlier, the output of the waste incineration process is electrical energy that is in deployment in the City of Tokyo sold to the public and business. It can also be applied in Indonesia. In addition to meeting the electricity needs of the community can also be a business field for organizations that manage it.

In Indonesia, the use of a new city-scale incinerator is carried out in Surabaya. However, due to technical problems that have occurred early on, these incinerators tend to be less functional. Modular scale incinerators (small scale), many tried in several cities in Indonesia, although apparently experiencing some problems, such as high operating costs, the emergence of visually visible environmental problems such as smoke and smell.

Physical Asset Management

Running a company including factories, asset-related decisions, especially physical assets, are very crucial. This is because the success of a plant's operation is strongly influenced by the condition and performance of its assets. In consequence, a company must be very careful in managing its assets. A systematic approach to identifying issues related to assets and providing mechanisms for improvement offered by asset management. According to Lukman and Akbar (2010), asset management concept was first created by private industry. The application of asset management has proven to give positive results and generate significant profits for private companies. Summerell (2005) in Hanis et al. (2010) believes in the benefit of asset management implementation such as to reduce operating cost in real property operations, reduce vacancy rates and improve the fulfillment of lead time related to real property use optimization; and manage value, auditable benefits, and costs in portfolio management.

Based on AGLG (2015), asset management is defined as the process of managing the cost of local government’s capital assets effectively. It involves analyzing the lifecycle and capacity of each asset and developing information on maintenance requirements, service levels and new asset needs. According to Gima (2013), asset management is a science and an art to guide the management of assets which includes the process of asset need planning, acquisition, inventory, legal audit, valuation, operation, maintenance, renewal, or disposal in order to transfer assets effectively and efficiently. According to Siregar (2004), there are several stages in the management of assets, if executed properly it will provide great benefits for the government in improving the effectiveness and efficiency of creating added value in managing assets in an orderly, accountable and transparent manner. These stages include inventory of assets, legal audit of assets, asset valuation, asset optimization and monitoring & control of assets.

Moreover, the management of physical assets has been a popular field in the last decade, and is recognized in many disciplines. All types of organizations have increasingly recognized the importance of managing physical assets. The topic of physical asset management (PAM) is evolving rapidly in various engineering disciplines worldwide. Physical Asset Management (PAM) is a complex subject that involves many disciplines. According to Hastings (2010), typical assets can include any physical items: machinery, buildings, vehicles, pipes, and wires, as well as associated information, technical control, and software systems that are used to serve a business or organizational function. From this, an engineering perspective on asset

management concentrates on the operational performance of physical assets. Mitchell (2007) points out the need to maintain and increase revenue, effectiveness, and customer satisfaction while reducing operating, support and capital costs. These necessities need to be balanced, and are crucial to achieving effective asset management. This is considered to be the largest challenge in operation and production enterprises. This article primarily focuses on the management of tangible, physical assets.

Based on the definition of financial accounting, an asset is a tangible economic resource or not, which is expected to provide business benefits in the future. Furthermore, in the accounting, the asset is divided into two, namely current assets and fixed asset. Included in current assets are cash and assets that can be readily converted into temporary money (inventory, accounts receivable) which are either in form or not, which have a value lasting longer than one year, such as buildings, equipment, Machines, etc. Fixed assets such as goodwill, patents, licenses, etc. According to the definition, physical assets are part of tangible fixed assets. This definition in the context of the industry, can be clarified again as physical objects / goods / builds that functioned in the business efforts of organizations that have it. Examples: buildings, factories, machinery, equipment, etc. In relation to management, we may have often heard the term asset management. What's the connection here? The term asset management tends to lead to the management of assets of an investment such as stocks, securities, land, buildings and the like.

Unlike the physical asset management intended here. Here the management of physical assets is the management of physical assets in an effort to achieve the desired output companies or organizations that have it. The management of these physical assets greatly affects operational performance and profitability for the industries that operate the assets as their core business. As the objective of an industry is established, the management of physical assets consists of activities related to:

1. Identify what assets are needed
2. Identify the necessary budgets
3. Procurement of such assets
4. Provision of logistics and maintenance support (maintenance)
5. Termination / renewal of assets

Where the activity is carried out effectively and efficiently in achieving the desired objective.

One of the standards that has set deeper on the management of physical assets is PAS (Publicly Available Specification) 55. PAS 55 is the standard of BSI (British Standards Institution's) for management of asset management so that physically, the assets owned can be managed optimally. PAS 55 provides clear guidance and explanation and definition of the asset management system that is poured in 28 objective requirements, from life cycle strategy to daily maintenance and maintenance. With this objectivity allows integration of all aspects of the asset cycle, ie from the identification of the need for design, acquisition, construction, commissioning, utilization or operation, maintenance, modification, refurbishment and / or disposal. In principle, PAS 55 teaches how to manage large value assets in a coordinated and systematic way to get the best performance, and to calculate the optimal cost to get the lowest possible risk. The management system of PAS 55 is very appropriate to apply in various business fields such as gas company, electricity, water treatment, road, air transportation, railway industry, public facilities, process, manufacturing industry, mining etc.

Unlike other standards, the asset management system - PAS 55 contains the principle of in place & in use with the understanding that PAS 55 specifically requires evidence of harmony between goodwill and reality on the ground. So ascertaining that life cycle planning principles, risk management, cost / benefit, customer focus and sustainability, etc., really happen in the daily activities of project implementation, operation, maintenance. If a company / institution that has adopted a systematic approach to PAS 55 will consistently improve the cost efficiency and performance of the company will be better, especially in terms of asset management. For government institutions or SOEs that plan to implement a good governance system need not worry because in PAS 55 also provides clear evidence of sustainable governance to customers, investors, regulators and other stakeholders. PAS 55 is highly structured so that it can naturally be integrated with quality management systems such as ISO9001, ISO14001 and ISO18001; Because the PAS 55 is

structurally similar to the ISO system that all the requirements are structured with the PDCA (Plan-Do-Check-Action) framework in which the PLAN makes strategic management as a reference for the organization's strategy plan, its DO implementation of the asset management plan , The CHECK is the Monitor and measures the achievement of the goal, ACTIONS is taking action to improve the performance and asset management system.

The main purpose of PAS 55 is to improve the performance of physical assets. Where Key Processes are required include:

1. Establish policy
2. Formulate Strategy
3. Asset Management Planning
4. Implementation of Asset Management Plan
5. Establishing Asset Management Capabilities
6. Risk Management and Performance Improvement
7. Asset Management Knowledge

Physical Asset Management in Shin Koto Incineration Plant

In general, according to my observations, Japanese people have understood and applied the concept of managing physical assets well, this is happening at the community and business level. At the community level, it can be seen from the tendency of Japanese consumers to buy more products that have better quality materials than to choose cheaper products but have a lower quality of ingredients. This indicates that they realize the use of low-quality products will make them spend more money because of the cost of more expensive maintenance and more frequent replacement because of low quality products tend to quickly break down. On the other hand, in terms of maintenance, they are willing to spend a lot of money to make products or in this case their assets have a longer life that will ultimately provide more benefits to product consumption.

At the business level, we can see a general example of the good management of physical assets in taxi companies. It is interesting if we see the taxi operating in Japan is still using old cars making the 90s and even 80s. If we look closely it can be concluded that although the car used for taxi operation is already more than 20 years old but still very feasible to use both from the outside view and engine conditions, even I did not find from the car that the smoke disposal is black, It shows that taxi companies have paid car maintenance fees and taxi drivers have been made aware of the importance of paying attention to the condition of the car tax.

Examples of good asset management at the business level can also be observed in the management of Tsukiji Fish Outer Market. Tsukiji market is a big wholesale market for fish, fruits and vegetables located in downtown Tokyo. In this place, we can see also all kinds of traditional Japanese food. This market is the most famous of more than ten wholesale markets that handle food and flower distribution in Tokyo. There are many retail stores that sell fish, vegetables and various restaurants lined the streets. Existence of infrastructure in this market is very important especially building and operational vehicles such as box cars and small vehicles with four wheels that serves to mobilize fish around the market area. Asset management in this market is intended to extend the asset's use (economic life). This can be seen from the many workshops that we can find around this market. According to my observations, the improvements made to these vehicles are not major improvements but in the course of regular maintenance. So, do not be strange if we find many assets whose condition looks old but still used. This is because although the age of the vehicle is old but still functioning well and support the implementation of operational activities in the market.

To observe the implementation of physical asset management of Shin Koto Incineration Plant, I used 7 key features introduced by PAS 55:

a. Establish policy

This policy provides a framework for the management of physical assets throughout the Shin Koto Incineration Plant business unit. This policy also regulates the stages in which physical asset management will be implemented throughout all stages of operations efficiently and sustainably. As we know, in the process of incineration, physical assets play a very important role, the management of Shin Koto Incineration Plant has implemented policies mainly related to the maintenance and utilization of physical assets in an optimal way to support the incineration process from garbage hauling to the filtration of residual disposal of combustion.

b. Formulate Strategy

Asset management strategy is an ongoing process for determining the range and level of assets needed to achieve strategic objectives. A strategic asset management review is the beginning of an ongoing process of asset management improvement to ensure that management is capable of delivering quality services. The strategy that has been built by Shin Koto Incineration Plant management is done to achieve the objectives of the company that is to maximize the volume of waste that can be handled and generate the amount of electricity that meets the quota. This is done effectively through asset management by combining management, finance, economics, engineering and other practices for the physical asset.

c. Asset management Planning

By incorporating asset planning into the strategic planning framework, the long-term implications of corporate-level decision-making on assets can be identified and an adequate response can be made. The main reason to create / operate, and maintain assets for an organization is to support the company's operational and productivity. Physical asset planning at Shin Koto Incineration Plant has done well especially problem of maintenance of combustion facility.

d. Implementation of Asset Management Plan

Plans that have been compiled must be supported by the availability of funds and adequate human resources to execute them. The annual maintenance fund to keep the physical assets from machine to building has the largest portion. Implementation of a physical asset management plan is focused on waste combustion facilities by installing the best engineering people who know the ins and outs of the machine.

e. Establishing Asset Management Capabilities

Capability is the ability to manage resources in this case physical assets. Physical assets can be a force that affects competitiveness. But physical assets can also be a weakness if poorly managed or we do not have the capacity to manage them, while others have that capacity. As discussed earlier, Shin Koto Incineration Plant can handle 1,800 tons of waste per day and generate approximately 50,000 kW of electricity. Capacity that is used as a standard by this factory in its activities.

f. Risk Management and Performance Improvement

Basically the risks associated with physical assets are included in operational risk, particularly in the course of running a process. There are several types of causes of an asset at risk. In the management of Shin Koto Incineration Plant, the most important cause is the physical form that is related to things or events that are directly related to the physical situation. Inherent supervision has been applied by Shin Koto Incineration Plant to its physical assets, this is done by a 24-hour camera mechanism. This is done to monitoring the condition of assets in real time and maintain its performance. The purpose is to maintain physical risk and performance of the plant will improve.

g. Asset Management Knowledge

Knowledge management involves the identification and analysis of available and required knowledge, and the subsequent planning and control of actions to develop knowledge assets so as to fulfil organizational objectives. Management Shin Koto Incineration Plant continues to update and improve its waste management mechanism so that it can be done effectively and efficiently.

Recommendation

Waste incineration can be the answer to the problem of waste management and the fulfillment of electrical energy in Indonesia. Therefore, the relevant ministries and also local government should coordinate to implement the incineration plant system in terms of managing waste which is increasingly becoming a major problem. Although initially requires a high investment value but in the long run can be a solution to the addition of waste volume in the resulting growing residential and business environment.

In terms of incineration mechanisms and physical asset management, the Indonesian government can conduct a comparative study to the Shin Koto Incineration Plant which has successfully implemented the mechanism for almost 20 years.

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